

CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended). A communication system, comprising:

a plurality of transceivers;

a communication bus connected to said plurality of said transceivers to enable transmission of communication information between individual ones of said plurality of said transceivers;

said communication bus having a ring-shaped structure connecting each one of said plurality of said transceivers to a respective one of said plurality of said transceivers that is adjacent in a clockwise direction, defined as a respective clockwise adjacent transceiver, and to a respective one of said plurality of said transceivers that is adjacent in a counterclockwise direction, defined as a respective counterclockwise adjacent transceiver;

said communication bus having a plurality of bus sections defining a plurality of first bus sections and a plurality of second bus sections;

each one of said plurality of said transceivers being connected to said
respective clockwise adjacent transceiver via a respective one of said plurality
of said first bus sections;

each one of said plurality of said transceivers being connected to said
respective counterclockwise adjacent transceiver via a respective one of said
plurality of said second bus sections;

each one of said plurality of said transceivers including a first receiver and a
first transmitter that are associated with a respective one of said plurality of said
first bus sections;

each one of said plurality of said transceivers including a second receiver and a
second transmitter that are associated with a respective one of said plurality of
said second bus sections;

each one of said plurality of said transceivers including a control device for
controlling said first receiver of said one of said plurality of said transceivers,
said second receiver of said one of said plurality of said transceivers, said first
transmitter of said one of said plurality of said transceivers, and said second
transmitter of said one of said plurality of said transceivers;

said control device of each of said transceivers activating said first transmitter for transmitting first ones of the communication information in the clockwise direction via said communication bus;

said control device of each of said transceivers activating said second transmitter for transmitting second ones of the communication information in the counterclockwise direction via said communication bus;

said control device of each of said transceivers being constructed such that, when an operation is being performed to transmit at least one of the first ones of the communication information and the second ones of the communication information, said control device of said transceivers checking for an error and if the error is found, said control device of said transceivers, after a given delay time, causing an operation to be performed to retransmit at least one of the first ones of the communication information and the second ones of the communication information via a transmitter that is selected from the group consisting of said first transmitter and said second transmitter;

said control device of each one of said plurality of said transceivers constructed to identify retransmitted communication information; and

said control device of each one of said plurality of said transceivers constructed such that:

when ones of the communication information are received, which are not intended for said one of said plurality of said transceivers and which have been identified as being retransmitted by said control device of another one of said plurality of said transceivers, said control device of said one of said plurality of said transceivers prevents a retransmission of the ones of the communication information if during the retransmitting of the ones of the communication information an error was detected; and

when the ones of the communication information are received, which are not intended for said one of said plurality of said transceivers and which have been identified as being retransmitted by said control device of another one of said plurality of said transceivers, said control device of said one of said plurality of said transceivers prevents a retransmission of the ones of the communication information if a bus section is, selected from the group consisting of an occupied one of said plurality of said first bus sections and an occupied one of said plurality of said second bus sections, via which the ones of the communication information are to be forwarded; and

wherein when one of said plurality of said transceivers initiates a transmission of the communication information on said communication bus, the one of said plurality of said transceivers simultaneously transmits the communication information in the clockwise direction and in the counterclockwise direction.

Claim 2 (previously presented). The communication system according to claim 1, wherein said control device of each one of said plurality of said transceivers is constructed such that, when the first ones of the communication information and the second ones of the communication information are not being transmitted by said one of said plurality of said transceivers, said control device of said one of said plurality of said transceivers activates said first receiver and said second receiver.

Claim 3 (previously presented). The communication system according to claim 2, wherein said control device of each one of said plurality of said transceivers is constructed such that, when ones of the communication information not intended for said one of said plurality of said transceivers is received by a receiver selected from the group consisting of said first receiver and said second receiver, said control device of said one of said plurality of said transceivers activates a transmitter selected from the group consisting of said first transmitter and said second transmitter.

Claim 4 (previously presented). The communication system according to claim 2, wherein:

said control device of each one of said plurality of said transceivers is constructed such that, when a communication information not intended for said one of said plurality of said transceivers is received by a receiver selected from the group consisting of said first receiver and said second receiver, then:

said control device of said one of said transceivers activates a given transmitter, selected from the group consisting of said first transmitter and said second transmitter, only if no communication information is currently being received via one of said plurality of said bus sections associated with said given transmitter.

Claim 5 (original). The communication system according to claim 1, wherein each one of said plurality of said transceivers includes a storage device for storing communication information that is defined as stored communication information and that is selected from the group consisting of information to be transmitted and information to be forwarded.

Claim 6 (previously presented). The communication system according to claim 5, wherein:

said control device of each of said transceivers is constructed such that, if ones of the communication information are currently being received via said respective one of said plurality of said first bus sections and if said first transmitter is to be activated, then after a predetermined delay time, the stored communication information is read out from said storage device and is attempted to be forwarded via said respective one of said plurality of said first bus sections; and

said control device of each of said transceivers is constructed such that, if ones of the communication information are currently being received via said respective one of said plurality of said second bus sections and if said second transmitter is to be activated, then after a predetermined delay time, the stored communication information is read out from said storage device and is attempted to be forwarded via said respective one of said plurality of said second bus sections.

Claim 7 (canceled).

Claim 8 (canceled).

Claim 9 (currently amended). A communication system, comprising:

a plurality of transceivers;

a communication bus connected to said plurality of said transceivers to enable transmission of communication information between individual ones of said plurality of said transceivers;

said communication bus having a ring-shaped structure connecting each one of said plurality of said transceivers to a respective one of said plurality of said transceivers that is adjacent in a clockwise direction, defined as a respective clockwise adjacent transceiver, and to a respective one of said plurality of said

transceivers that is adjacent in a counterclockwise direction, defined as a respective counterclockwise adjacent transceiver;

said communication bus having a plurality of bus sections defining a plurality of first bus sections and a plurality of second bus sections;

each one of said plurality of said transceivers being connected to said respective clockwise adjacent transceiver via a respective one of said plurality of said first bus sections;

each one of said plurality of said transceivers being connected to said respective counterclockwise adjacent transceiver via a respective one of said plurality of said second bus sections;

each one of said plurality of said transceivers including a first receiver and a first transmitter that are associated with a respective one of said plurality of said first bus sections;

each one of said plurality of said transceivers including a second receiver and a second transmitter that are associated with a respective one of said plurality of said second bus sections;

each one of said plurality of said transceivers including a control device for controlling said first receiver of said one of said plurality of said transceivers,

said second receiver of said one of said plurality of said transceivers, said first transmitter of said one of said plurality of said transceivers, and said second transmitter of said one of said plurality of said transceivers;

said control device of each of said transceivers activating said first transmitter for transmitting first ones of the communication information in the clockwise direction via said communication bus;

said control device of each of said transceivers activating said second transmitter for transmitting second ones of the communication information in the counterclockwise direction via said communication bus;

each one of said plurality of said transceivers includes a storage device for storing communication information that is defined as stored communication information;

for each one of the communication information to be transmitted, a particular one of said plurality of said transceivers is defined as a switching unit;

said control device of said switching unit is constructed such that, when corresponding ones of the communication information are received via a corresponding bus section selected from the group consisting of one of said plurality of said first bus sections and one of said plurality of said second bus sections, said control device of said switching unit temporarily stores the ones

of the communication information in said storage device of said switching unit and forwards the ones of the communication information via another corresponding bus section selected from the group consisting of one of said plurality of said first bus sections and one of said plurality of said second bus sections, after a predetermined period of time has elapsed; and

wherein when one of said plurality of said transceivers initiates a transmission of the communication information on said communication bus, the one of said plurality of said transceivers simultaneously transmits the communication information in the clockwise direction and in the counterclockwise direction.

Claim 10 (original). The communication system according to claim 9, wherein:

said control device of said switching unit is constructed such that, if within the predetermined period of time, the corresponding ones of the communication information have been received both via one of said plurality of said first bus sections and one of said plurality of said second bus sections, said control device of said switching unit temporarily stores the corresponding ones of the communication information and after the predetermined period of time has elapsed, said control device of said switching unit forwards the corresponding ones of the communication information.

Claim 11 (previously presented). The communication system according to claim 9, wherein:

said control device of said switching unit is constructed such that, if within the predetermined period of time, the corresponding ones of the communication information have been received only via a bus section selected from the group consisting of one of said plurality of said first bus sections and one of said plurality of said second bus sections, said control device of said switching unit only reads out of said storage device and forwards the corresponding ones of the communication information.

Claim 12 (original). The communication system according to claim 1, wherein:

said communication bus includes a first communication channel for exclusively transmitting the communication information in the clockwise direction; and

said communication bus includes a second communication channel for exclusively transmitting the communication information in the counterclockwise direction.

Claim 13 (original). The communication system according to claim 12, wherein:

said first receiver of each one of said plurality of said transceivers has an input connected to said second communication channel of said plurality of said first bus sections;

said second receiver of each one of said plurality of said transceivers has an input connected to said first communication channel of said plurality of said second bus sections;

said first transmitter of each one of said plurality of said transceivers has an output connected to said first communication channel of said plurality of said first bus sections; and

said second transmitter of each one of said plurality of said transceivers has an output connected to said second communication channel of said plurality of said second bus sections.

Claim 14 (previously presented). The communication system according to claim 12, wherein:

said control device of each of said transceivers is constructed to activate said first transmitter to transmit the first ones of the communication information in the clockwise direction via said first communication channel; and

said control device of each of said transceivers is constructed to activate said second transmitter to transmit the second ones of the communication information in the counterclockwise direction via said second communication channel.

Claim 15 (currently amended). A communication system, comprising:

a plurality of transceivers;

a communication bus connected to said plurality of said transceivers to enable transmission of communication information between individual ones of said plurality of said transceivers;

said communication bus having a ring-shaped structure connecting each one of said plurality of said transceivers to a respective one of said plurality of said transceivers that is adjacent in a clockwise direction, defined as a respective clockwise adjacent transceiver, and to a respective one of said plurality of said transceivers that is adjacent in a counterclockwise direction, defined as a respective counterclockwise adjacent transceiver;

said communication bus having a plurality of bus sections defining a plurality of first bus sections and a plurality of second bus sections;

each one of said plurality of said transceivers being connected to said respective clockwise adjacent transceiver via a respective one of said plurality of said first bus sections;

each one of said plurality of said transceivers being connected to said
respective counterclockwise adjacent transceiver via a respective one of said
plurality of said second bus sections;

each one of said plurality of said transceivers including a first receiver and a
first transmitter that are associated with a respective one of said plurality of said
first bus sections;

each one of said plurality of said transceivers including a second receiver and a
second transmitter that are associated with a respective one of said plurality of
said second bus sections;

each one of said plurality of said transceivers including a control device for
controlling said first receiver of said one of said plurality of said transceivers,
said second receiver of said one of said plurality of said transceivers, said first
transmitter of said one of said plurality of said transceivers, and said second
transmitter of said one of said plurality of said transceivers;

each one of said plurality of said transceivers including a storage device for
storing stored communication information to be transmitted to another one of
said plurality of said transceivers;

for each one of the communication information to be transmitted, a particular
one of said plurality of said transceivers is defined as a switching unit;

said control device of said switching unit constructed such that, when corresponding ones of the communication information are received via a corresponding bus section selected from the group consisting of one of said plurality of said first bus sections and one of said plurality of said second bus sections, said control device of said switching unit temporarily stores the ones of the communication information in said storage device of said switching unit and forwards the ones of the communication information via another corresponding bus section selected from the group consisting of one of said plurality of said first bus sections and one of said plurality of said second bus sections, after a predetermined period of time has elapsed and

wherein when one of said plurality of said transceivers initiates a transmission of the communication information on said communication bus, the one of said plurality of said transceivers simultaneously transmits the communication information in the clockwise direction and in the counterclockwise direction.

Claim 16 (previously presented). The communication system according to claim 15, wherein said control device of each one of said plurality of said transceivers is constructed such that, when the communication information is not being transmitted by the one of said plurality of said transceivers, said control device of said one of said plurality of said transceivers activates said first receiver and said second receiver.

Claim 17 (previously presented). The communication system according to claim 15, wherein said control device of each one of said plurality of said transceivers is constructed such that, when ones of the communication information not intended for said one of said plurality of said transceivers is received by a receiver selected from the group consisting of said first receiver and said second receiver, said control device of said one of said plurality of said transceivers forwards the ones of the communication information by activating a transmitter selected from the group consisting of said first transmitter and said second transmitter.

Claim 18 (previously presented). The communication system according to claim 15, wherein:

said control device of each of said transceivers is constructed to activate said first transmitter to transmit given ones of the communication information in the clockwise direction via said communication bus; and

said control device of each of said transceivers is constructed to activate said second transmitter to transmit the given ones of the communication information in the counterclockwise direction via said communication bus.

Claim 19 (previously presented). The communication system according to claim 15, wherein:

said control device of each of said transceivers is constructed to activate said first transmitter to transmit first ones of the communication information in the clockwise direction via said communication bus; and

said control device of each of said transceivers is constructed to activate said second transmitter to transmit second ones of the communication information in the counterclockwise direction via said communication bus.

Claim 20 (previously presented). The communication system according to claim 15, wherein:

said control device of each one of said plurality of said transceivers is constructed such that, when a communication information not intended for said one of said plurality of said transceivers is received by a receiver selected from the group consisting of said first receiver and said second receiver, then:

said control device of said one of said plurality of said transceivers activates a given transmitter, selected from the group consisting of said first transmitter and said second transmitter, only if no communication information is currently being received via one of said plurality of said bus sections associated with said given transmitter.

Claim 21 (previously presented). The communication system according to claim 15, wherein:

said control device of each of said transceivers is constructed such that, if ones of the communication information are currently being received via said respective one of said plurality of said first bus sections and if said first transmitter is to be activated, then after a predetermined delay time, the stored communication information is read out from said storage device and is attempted to be forwarded via said respective one of said plurality of said first bus sections; and

said control device of each of said transceivers is constructed such that, if ones of the communication information are currently being received via said respective one of said plurality of said second bus sections and if said second transmitter is to be activated, then after a predetermined delay time, the stored communication information is read out from said storage device and is attempted to be forwarded via said respective one of said plurality of said second bus sections.

Claim 22 (previously presented). The communication system according to claim 15, wherein said control device of each of said transceivers is constructed such that, when an operation is being performed to transmit the communication information, said control device performing the transmitting checks for an error and if the error is found, said control device performing the transmitting, after a given delay time, causes an operation to be performed for retransmitting the stored communication information via a transmitter that is

selected from the group consisting of said first transmitter and said second transmitter.

Claim 23 (previously presented). The communication system according to claim 22, wherein:

said control device of each one of said plurality of said transceivers is constructed to identify retransmitted communication information; and

said control device of each one of said plurality of said transceivers is constructed such that:

when ones of the communication information are received, which are not intended for said one of said plurality of said transceivers and which have been identified as being retransmitted by said control device of another one of said plurality of said transceivers, said control device of said one of said plurality of said transceivers prevents a retransmission of the ones of the communication information if during the retransmitting of the ones of the communication information an error was detected; and

when the ones of the communication information are received, which are not intended for said one of said plurality of said transceivers and which have been identified as being retransmitted by said control device of another one of said plurality of said transceivers, said control device of

said one of said plurality of said transceivers prevents a retransmission of the ones of the communication information if a bus section is, selected from the group consisting of an occupied one of said plurality of said first bus sections and an occupied one of said plurality of said second bus sections, via which the ones of the communication information are to be forwarded.

Claim 24 (canceled).

Claim 25 (previously presented). The communication system according to claim 15, wherein:

said control device of said switching unit is constructed such that, if within the predetermined period of time, the corresponding ones of the communication information have been received both via one of said plurality of said first bus sections and one of said plurality of said second bus sections, said control device of said switching unit temporarily stores the corresponding ones of the communication information and after the predetermined period of time has elapsed, said control device of said switching unit forwards the corresponding ones of the communication information.

Claim 26 (previously presented). The communication system according to claim 15, wherein:

said control device of said switching unit is constructed such that, if within the predetermined period of time, the corresponding ones of the communication information have been received only via a bus section selected from the group consisting of one of said plurality of said first bus sections and one of said plurality of said second bus sections, said control device of said switching unit only reads out of said storage device and forwards the corresponding ones of the communication information.

Claim 27 (original). The communication system according to claim 15, wherein:

said communication bus includes a first communication channel for exclusively transmitting the communication information in the clockwise direction; and

said communication bus includes a second communication channel for exclusively transmitting the communication information in the counterclockwise direction.

Claim 28 (original). The communication system according to claim 27, wherein:

said first receiver of each one of said plurality of said transceivers has an input connected to said second communication channel of said plurality of said first bus sections;

said second receiver of each one of said plurality of said transceivers has an input connected to said first communication channel of said plurality of said second bus sections;

said first transmitter of each one of said plurality of said transceivers has an output connected to said first communication channel of said plurality of said first bus sections; and

said second transmitter of each one of said plurality of said transceivers has an output connected to said second communication channel of said plurality of said second bus sections.

Claim 29 (previously presented). The communication system according to claim 27, wherein:

said control device of each of said transceivers is constructed to activate said first transmitter to transmit given ones of the communication information in the clockwise direction via said first communication channel; and

said control device of each of said transceivers is constructed to activate said second transmitter to transmit the given ones of the communication information in the counterclockwise direction via said second communication channel.

Claim 30 (previously presented). The communication system according to claim 27, wherein:

said control device of each of said transceivers is constructed to activate said first transmitter to transmit first ones of the communication information in the clockwise direction via said first communication channel; and

said control device of each of said transceivers is constructed to activate said second transmitter to transmit second ones of the communication information in the counterclockwise direction via said second communication channel.

Claim 31 (currently amended). A communication system, comprising:

a plurality of transceivers for transmitting communication information;

a communication bus having a ring-shaped structure connecting each one of said plurality of said transceivers to a respective one of said plurality of said transceivers that is adjacent in a clockwise direction, defined as a respective clockwise adjacent transceiver, and to a respective one of said plurality of said transceivers that is adjacent in a counterclockwise direction, defined as a respective counterclockwise adjacent transceiver;

said communication bus having a plurality of bus sections defining a plurality of first bus sections and a plurality of second bus sections;

each one of said plurality of said transceivers including a first receiver and a first transmitter that are associated with a respective one of said plurality of said first bus sections;

each one of said plurality of said transceivers including a second receiver and a second transmitter that are associated with a respective one of said plurality of said second bus sections;

each one of said plurality of said transceivers including a control device for controlling said first receiver of said one of said plurality of said transceivers, said second receiver of said one of said plurality of said transceivers, said first transmitter of said one of said plurality of said transceivers, and said second transmitter of said one of said plurality of said transceivers;

said control device of each of said transceivers being constructed such that, when an operation is being performed for transmitting the communication information, said control device doing the transmitting checks for an error and if the error is found, said control device doing the transmitting, after a given delay time, causes an operation to be performed for retransmitting the communication information via a transmitter that is selected from the group consisting of said first transmitter and said second transmitter;

said control device of each one of said plurality of said transceivers constructed to identify retransmitted communication information; ~~and~~

said control device of each one of said plurality of said transceivers is constructed such that:

when ones of the communication information are received, which are not intended for said one of said plurality of said transceivers and which have been identified as being retransmitted by said control device of another one of said plurality of said transceivers, said control device of said one of said plurality of said transceivers prevents a retransmission of the ones of the communication information if during the retransmitting of the ones of the communication information an error was detected; and

when the ones of the communication information are received, which are not intended for said one of said plurality of said transceivers and which have been identified as being retransmitted by said control device of another one of said plurality of said transceivers, said control device of said one of said plurality of said transceivers prevents a retransmission of the ones of the communication information if a bus section is, selected from the group consisting of an occupied one of said plurality of said first bus sections and an occupied one of said plurality of said second bus sections, via which the ones of the communication information are to be forwarded; and

wherein when one of said plurality of said transceivers initiates a transmission of the communication information on said communication bus, the one of said plurality of said transceivers simultaneously transmits the communication information in the clockwise direction and in the counterclockwise direction.

Claim 32 (previously presented). The communication system according to claim 31, wherein said control device of each one of said plurality of said transceivers is constructed such that, when the communication information is not being transmitted by the one of said plurality of said transceivers, said control device of said one of said plurality of said transceivers activates said first receiver and said second receiver.

Claim 33 (previously presented). The communication system according to claim 31, wherein said control device of each one of said plurality of said transceivers is constructed such that, when ones of the communication information not intended for said one of said plurality of said transceivers is received by a receiver selected from the group consisting of said first receiver and said second receiver, said control device of said one of said plurality of said transceivers forwards the ones of the communication information by activating a transmitter selected from the group consisting of said first transmitter and said second transmitter.

Claim 34 (previously presented). The communication system according to claim 31, wherein:

said control device of each of said transceivers is constructed to activate said first transmitter to transmit given ones of the communication information in the clockwise direction via said communication bus; and

said control device of each of said transceivers is constructed to activate said second transmitter to transmit the given ones of the communication information in the counterclockwise direction via said communication bus.

Claim 35 (previously presented). The communication system according to claim 31, wherein:

said control device of each of said transceivers is constructed to activate said first transmitter to transmit first ones of the communication information in the clockwise direction via said communication bus; and

said control device of each of said transceivers is constructed to activate said second transmitter to transmit second ones of the communication information in the counterclockwise direction via said communication bus.

Claim 36 (previously presented). The communication system according to claim 31, wherein:

said control device of each one of said plurality of said transceivers is constructed such that, when a communication information not intended for said one of said plurality of said transceivers is received by a receiver selected from the group consisting of said first receiver and said second receiver, then:

said control device of said one of said plurality of said transceivers activates a given transmitter, selected from the group consisting of said first transmitter and said second transmitter, only if no communication information is currently being received via one of said plurality of said bus sections associated with said given transmitter.

Claim 37 (original). The communication system according to claim 31, wherein each one of said plurality of said transceivers includes a storage device for storing communication information that is defined as stored communication information and that is selected from the group consisting of information to be transmitted and information to be forwarded.

Claim 38 (previously presented). The communication system according to claim 37, wherein:

said control device of each of said transceivers is constructed such that, if ones of the communication information are currently being received via said respective one of said plurality of said first bus sections and if said first

transmitter is to be activated, then after a predetermined delay time, the stored communication information is read out from said storage device and is attempted to be forwarded via said respective one of said plurality of said first bus sections; and

said control device of each of said transceivers is constructed such that, if ones of the communication information are currently being received via said respective one of said plurality of said second bus sections and if said second transmitter is to be activated, then after a predetermined delay time, the stored communication information is read out from said storage device and is attempted to be forwarded via said respective one of said plurality of said second bus sections.

Claim 39 (canceled).

Claim 40 (previously presented). The communication system according to claim 31, wherein:

each one of said plurality of said transceivers includes a storage device for storing communication information that is defined as stored communication information and that is selected from the group consisting of information to be transmitted and information to be forwarded;

for each one of the communication information to be transmitted, a particular one of said plurality of said transceivers is defined as switching unit;

said control device of said switching unit is constructed such that, when corresponding ones of the communication information are received via a corresponding bus section selected from the group consisting of one of said plurality of said first bus sections and one of said plurality of said second bus sections, said control device of said switching unit temporarily stores the ones of the communication information in said storage device of said switching unit and forwards the ones of the communication information via another corresponding bus section selected from the group consisting of one of said plurality of said first bus sections and one of said plurality of said second bus sections, after a predetermined period of time has elapsed.

Claim 41 (original). The communication system according to claim 40, wherein:

said control device of said switching unit is constructed such that, if within the predetermined period of time, the corresponding ones of the communication information have been received both via one of said plurality of said first bus sections and one of said plurality of said second bus sections, said control device of said switching unit temporarily stores the corresponding ones of the communication information and after the predetermined period of time has elapsed, said control device of said switching unit forwards the corresponding ones of the communication information.

Claim 42 (original). The communication system according to claim 40, wherein:

said control device of said switching unit is constructed such that, if within the predetermined period of time, the corresponding ones of the communication information have been received only via a bus section selected from the group consisting of one of said plurality of said first bus sections and one of said plurality of said second bus sections, said control device of said switching unit only reads out of said storage means and forwards the corresponding ones of the communication information.

Claim 43 (original). The communication system according to claim 31, wherein:

said communication bus includes a first communication channel for exclusively transmitting the communication information in the clockwise direction; and

said communication bus includes a second communication channel for exclusively transmitting the communication information in the counterclockwise direction.

Claim 44 (original). The communication system according to claim 43, wherein:

said first receiver of each one of said plurality of said transceivers has an input connected to said second communication channel of said plurality of said first bus sections;

said second receiver of each one of said plurality of said transceivers has an input connected to said first communication channel of said plurality of said second bus sections;

said first transmitter of each one of said plurality of said transceivers has an output connected to said first communication channel of said plurality of said first bus sections; and

said second transmitter of each one of said plurality of said transceivers has an output connected to said second communication channel of said plurality of said second bus sections.

Claim 45 (previously presented). The communication system according to claim 43, wherein:

said control device of each of said transceivers is constructed to activate said first transmitter to transmit given ones of the communication information in the clockwise direction via said first communication channel; and

said control device of each of said transceivers is constructed to activate said second transmitter to transmit the given ones of the communication information in the counterclockwise direction via said second communication channel.

Claim 46 (previously presented). The communication system according to claim 43, wherein:

said control device of each of said transceivers is constructed to activate said first transmitter to transmit first ones of the communication information in the clockwise direction via said first communication channel; and

said control device of each of said transceivers is constructed to activate said second transmitter to transmit second ones of the communication information in the counterclockwise direction via said second communication channel.

Claim 47 (currently amended). A communication system, comprising:

a plurality of transceivers;

a communication bus having a ring-shaped structure connecting each one of said plurality of said transceivers to a respective one of said plurality of said transceivers that is adjacent in a clockwise direction, defined as a respective clockwise adjacent transceiver, and to a respective one of said plurality of said

transceivers that is adjacent in a counterclockwise direction, defined as a respective counterclockwise adjacent transceiver;

said communication bus having a plurality of bus sections defining a plurality of first bus sections and a plurality of second bus sections;

each one of said plurality of said transceivers including a first receiver and a first transmitter that are associated with a respective one of said plurality of said first bus sections;

each one of said plurality of said transceivers including a second receiver and a second transmitter that are associated with a respective one of said plurality of said second bus sections;

each one of said plurality of said transceivers including a control device for controlling said first receiver of said one of said plurality of said transceivers, said second receiver of said one of said plurality of said transceivers, said first transmitter of said one of said plurality of said transceivers, and said second transmitter of said one of said plurality of said transceivers;

said control device of each of said transceivers being constructed to identify faulty communication information and to forward the identified faulty communication information;

each one of said plurality of said transceivers having a storage device for storing communication information defined as stored communication information and selected from the group consisting of information to be transmitted and information to be forwarded;

for each one of the communication information to be transmitted, a particular one of said plurality of said transceivers is defined as a switching unit;

said control device of said switching unit is constructed such that, when corresponding ones of the communication information are received via a corresponding bus section selected from the group consisting of one of said plurality of said first bus sections and one of said plurality of said second bus sections, said control device of said switching unit temporarily stores the ones of the communication information in said storage device of said switching unit and forwards the ones of the communication information via another corresponding bus section selected from the group consisting of one of said plurality of said first bus sections and one of said plurality of said second bus sections, after a predetermined period of time has elapsed; and

wherein when one of said plurality of said transceivers initiates a transmission of the information to be transmitted on said communication bus, the one of said plurality of said transceivers simultaneously transmits the information to be transmitted in the clockwise direction and in the counterclockwise direction.

Claim 48 (previously presented). The communication system according to claim 47, wherein said control device of each one of said plurality of said transceivers is constructed such that, when the communication information is not being transmitted by the one of said plurality of said transceivers, said control device of said one of said plurality of transceivers activates said first receiver and said second receiver.

Claim 49 (previously presented). The communication system according to claim 47, wherein said control device of each one of said plurality of said transceivers is constructed such that, when ones of the communication information not intended for said one of said plurality of said transceivers is received by a receiver selected from the group consisting of said first receiver and said second receiver, said control device of said one of said plurality of transceivers forwards the ones of the communication information by activating a transmitter selected from the group consisting of said first transmitter and said second transmitter.

Claim 50 (previously presented). The communication system according to claim 47, wherein:

said control device of each of said transceivers is constructed to activate said first transmitter to transmit given ones of the communication information in the clockwise direction via said communication bus; and

said control device of each of said transceivers is constructed to activate said second transmitter to transmit the given ones of the communication information in the counterclockwise direction via said communication bus.

Claim 51 (previously presented). The communication system according to claim 47, wherein:

said control device of each of said transceivers is constructed to activate said first transmitter to transmit first ones of the communication information in the clockwise direction via said communication bus; and

said control device of each of said transceivers is constructed to activate said second transmitter to transmit second ones of the communication information in the counterclockwise direction via said communication bus.

Claim 52 (previously presented). The communication system according to claim 51, wherein:

said control device of each one of said plurality of said transceivers is constructed such that, when a communication information not intended for said one of said plurality of said transceivers is received by a receiver selected from the group consisting of said first receiver and said second receiver, then:

said control device of said one of said plurality of said transceivers
activates a given transmitter, selected from the group consisting of said
first transmitter and said second transmitter, only if no communication
information is currently being received via one of said plurality of said
bus sections associated with said given transmitter.

Claim 53 (original). The communication system according to claim 47, wherein
each one of said plurality of said transceivers includes a storage device for
storing communication information that is defined as stored communication
information and that is selected from the group consisting of information to be
transmitted and information to be forwarded.

Claim 54 (previously presented). The communication system according to
claim 53, wherein:

said control device of each of said transceivers is constructed such that, if ones
of the communication information are currently being received via
said respective one of said plurality of said first bus sections and if said first
transmitter is to be activated, then after a predetermined delay time, the stored
communication information is read out from said storage device and is
attempted to be forwarded via said respective one of said plurality of said first
bus sections; and

said control device of each of said transceivers is constructed such that, if ones of the communication information are currently being received via said respective one of said plurality of said second bus sections and if said second transmitter is to be activated, then after a predetermined delay time, the stored communication information is read out from said storage device and is attempted to be forwarded via said respective one of said plurality of said second bus sections.

Claim 55 (previously presented). The communication system according to claim 53, wherein said control device of each of said transceivers is constructed such that, when an operation is being performed for transmitting the communication information, said control device performing the transmitting checks the communication information for an error and if the error is found, said control device performing the transmitting, after a given delay time, causes an operation to be performed for retransmitting the stored communication information via a transmitter that is selected from the group consisting of said first transmitter and said second transmitter.

Claim 56 (previously presented). The communication system according to claim 47, wherein:

said control device of each one of said plurality of said transceivers is constructed to identify retransmitted communication information; and

said control device of each one of said plurality of said transceivers is constructed such that:

when ones of the communication information are received, which are not intended for said one of said plurality of said transceivers and which have been identified as being retransmitted by said control device of another one of said plurality of said transceivers, said control device of said one of said plurality of said transceivers prevents a retransmission of the ones of the communication information if during the retransmitting of the ones of the communication information an error was detected, and

when the ones of the communication information are received, which are not intended for said one of said plurality of said transceivers and which have been identified as being retransmitted by said control device of another one of said plurality of said transceivers, said control device of said one of said plurality of said transceivers prevents a retransmission of the ones of the communication information if a bus section is, selected from the group consisting of an occupied one of said plurality of said first bus sections and an occupied one of said plurality of said second bus sections, via which the ones of the communication information are to be forwarded.

Claim 57 (canceled).

Claim 58 (previously presented). The communication system according to claim 47, wherein:

said control device of said switching unit is constructed such that, if within the predetermined period of time, the corresponding ones of the communication information have been received both via one of said plurality of said first bus sections and one of said plurality of said second bus sections, said control device of said switching unit temporarily stores the corresponding ones of the communication information and after the predetermined period of time has elapsed, said control device of said switching unit forwards the corresponding ones of the communication information.

Claim 59 (previously presented). The communication system according to claim 47, wherein:

said control device of said switching unit is constructed such that, if within the predetermined period of time, the corresponding ones of the communication information have been received only via a bus section selected from the group consisting of one of said plurality of said first bus sections and one of said plurality of said second bus sections, said control device of said switching unit only reads out of said storage means and forwards the corresponding ones of the communication information.

Claim 60 (original). The communication system according to claim 47, wherein:

said communication bus includes a first communication channel for exclusively transmitting the communication information in the clockwise direction; and

said communication bus includes a second communication channel for exclusively transmitting the communication information in the counterclockwise direction.

Claim 61 (original). The communication system according to claim 60, wherein:

said first receiver of each one of said plurality of said transceivers has an input connected to said second communication channel of said plurality of said first bus sections;

said second receiver of each one of said plurality of said transceivers has an input connected to said first communication channel of said plurality of said second bus sections;

said first transmitter of each one of said plurality of said transceivers has an output connected to said first communication channel of said plurality of said first bus sections; and

said second transmitter of each one of said plurality of said transceivers has an output connected to said second communication channel of said plurality of said second bus sections.

Claim 62 (previously presented). The communication system according to claim 60, wherein:

said control device of each of said transceivers is constructed to activate said first transmitter to transmit given ones of the communication information in the clockwise direction via said first communication channel; and

said control device of each of said transceivers is constructed to activate said second transmitter to transmit the given ones of the communication information in the counterclockwise direction via said second communication channel.

Claim 63 (previously presented). The communication system according to claim 60, wherein:

said control device of each of said transceivers is constructed to activate said first transmitter to transmit first ones of the communication information in the clockwise direction via said first communication channel; and

said control device of each of said transceivers is constructed to activate said second transmitter to transmit second ones of the communication information in the counterclockwise direction via said second communication channel.

Claim 64 (canceled).

Claim 65 (canceled).